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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/394,867	09/13/99	WILLIAMS D	7037-377/IU-

HM12/1127

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EXAMINER	
NGUYEN, D	
ART UNIT	**PAPER NUMBER**
1633	6

DATE MAILED: 11/27/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

File copy

Office Action Summary

Application No.	Applicant(s)
09/394,867	David Williams
Examiner	**Group Art Unit**
Dave Nguyen	1633

☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *11-93* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☐ Claim(s) _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claims *11-93* are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I. Claims 11-69, and 79-93, drawn to genetically modified viable mammalian cells including hematopoietic cells transduced by retroviral vectors in the presence of any polypeptide that provides a heparin II binding domain and a CS-1 binding domain, *ex vivo* gene therapy wherein the genetically modified hematopoietic stem cells transduced by retroviral vectors are employed, grafting method by using the genetically modified hematopoietic cells, classified in Class 435, subclasses 320.1, 325, 455, and Class 424, subclasses 93.2, and 93.21.

Group II. Claims 70-78, drawn to a method of making a construct useful for enhancing retroviral-mediated DNA transfer into a predetermined target cell, comprising the step of using a conjugate of a ligand specific the target cell and a polypeptide sequence which exhibit the retrovirus-binding activity of Heparin-II binding domain of fibronectin, classified in Class 435, subclass 320.1.

The inventions are distinct, each from the other because of the following reasons:

Although there are no provisions under the section for "Relationship of Inventions" in MPEP 806.05 for inventive groups that are directed to <u>different</u> methods, restriction is deemed to be proper because these methods appear to constitute patentably distinct inventions for the following reasons: The methods as claimed in Groups I and II are patentably distinct because they are directed to materially different methods. The claimed methods and cells of Group I are not directed to a conjugate of a ligand specific the target cell and a polypeptide sequence which exhibit the retrovirus-binding activity of Heparin-II binding domain of fibronectin, and the search of Group II claims directed to the making of the conjugate of a ligand specific the target cell and a polypeptide sequence which exhibit the retrovirus-binding activity of Heparin-II binding domain of fibronectin does not necessarily overlap with a search for prior art of Group I claims.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their divergent subject matter, fall into different statutory classes of invention,

and are separately classified and searched, and because it would be unduly burdensome for the examiner to search and consider patentability of all of the presently pending claims, restriction for examination purposes as indicated is proper.

Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

Sequence Rules

This application contains sequence disclosures (see page 67, for example) that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825 for the reason(s) set forth on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures. Note also that Sequence rules 37 CFR 1.821(d) requires the use of SEQ ID No: even if the sequence is embedded in the text of the description or in the claims. This requirement is also intended to permit references, in both the description and claims, to sequences set forth in the "Sequence Listing" by the use of assigned sequence identifiers without repeating the sequence in the text of the description or claims.

Any inquiry concerning this communication or earlier communications regarding the formalities should be directed to Patent Analyst Kimberly Davis, whose telephone number is **(703) 308-0009**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Dave Nguyen* whose telephone number is **(703) 305-2024**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Deborah Clark*, may be reached at **(703) 305-4051.**

Dave
Patent Examiner
Art Unit: 1633